

## ABSTRACT

A piezoelectric transformer, which operates in a half wavelength mode, includes an input part having input electrodes laminated in a thickness direction on a central part in a longitudinal direction of a piezoelectric element with rectangular shape, in which the input part is polarized in the thickness direction between the input electrodes, a pair of output parts provided along the longitudinal direction so as to sandwich the input part, in which the output parts are polarized in the same direction along the longitudinal direction, and an output electrode provided at an end part of each of the output parts, wherein  $L_1$ ,  $L_2$  and  $L_3$  satisfy a relationship of  $0.1 \leq (4L_2 - L_3)/4L_1 \leq 0.5$ , where  $L_1$  is a length of the piezoelectric element in the longitudinal direction,  $L_2$  is a length of the input part in the longitudinal direction, and  $L_3$  is a length of either one of the output electrodes in the longitudinal direction.